In accordance with the provisions of 37 C.F.R. §1.121(c)(1)(i), please amend claims 1, 2, 7, 8, 9, 12, 13, 14, 16, 17, 19, 21, 22, 23, 24, 29, and 30 to read as follows.

C1 Sub D1

1. (Thrice Amended) A method for assessing a compound's ability to prevent neuronal cell death, comprising:

a) contacting a compound with cultured neuronal cells having activated MLK activity, wherein the activated MLK activity is selected from the group consisting of an enzymatic activity, an ability to bind a SEK1 protein, and an ability to phosphorylate a SEK1 protein;

b) determining the number of cultured neuronal cells that die;

wherein a decreased number of dead cultured neuronal cells in the presence of the compound compared to the number of dead cultured neuronal cells in the absence of the compound is indicative of the compound's ability to prevent neuronal cell death.

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C2 Sub D2

2. (Once Amended) The method of Claim 1, wherein the neuronal cells are expressing a mutated protein or treated with a neurotoxin to induce apoptosis.

C3 Sub D3

7. (Once Amended) The compound of Claim 46, wherein the neurological condition is a neurological disease whereby glutamate or kainic acid mediated excitotoxicity is involved in neuronal cell death.

8. (Once Amended) The compound of Claim 46, wherein the neurological condition is Huntington's disease or Alzheimer's disease.

C4 Sub D4

9. (Twice Amended) A method for assessing a compound's ability to prevent neuronal cell death, comprising:

a) contacting a compound with cultured neuronal cells expressing a mutated protein or treated with a neurotoxin that induces neuronal cell death; and

b) determining the number of cultured neuronal cells that die;

wherein a decreased number of dead cultured neuronal cells in the presence of the compound compared to the number of dead cultured neuronal cells in the absence of the compound is indicative of the compound's ability to prevent neuronal cell death.

12. (Once Amended) The compound of Claim 47, wherein the neurological condition is a neurological disease whereby glutamate or kainic acid mediated excitotoxicity is involved in neuronal cell death.

13. (Once Amended) The compound of Claim 47, wherein the neurological condition is Huntington's disease or Alzheimer's disease.

14. (Thrice Amended) A method for assessing the ability of a compound to prevent neuronal cell death, comprising:

a) contacting a compound with cultured neuronal cells having activated MLK activity, wherein the activated MLK activity is selected from the group consisting of an enzymatic activity, an ability to bind a SEK1 protein, and an ability to phosphorylate a SEK1 protein;

b) contacting, in the presence of the compound, surviving cells from step (a) with an agent that induces apoptosis; and

c) comparing the level of apoptosis in the cells in the presence of the compound with the level of apoptosis in the cells in the absence of the compound;

wherein the compound is a potentially useful drug for treating the mammal when the level of apoptosis in the cells in the presence of the compound is less than the level of apoptosis in the cells in the absence of the compound.

16. (Once Amended) The method of Claim 15, wherein the neurotoxin is glutamate, quinolinic acid or kainic acid.

17. (Once Amended) The method of Claim 14, wherein step (b) is performed by transfecting the surviving neuronal cells with nucleic acid encoding a mutated form of huntingtin or amyloid precursor protein.

19. (Twice Amended) A method for assessing a compound's ability to inhibit MLK activity, comprising:

a) contacting a compound with a MLK protein and substrate therefor, wherein the MLK protein is selected from the group consisting of MLK1, MLK2, MLK3, and combinations thereof;

b) measuring the level of MLK activity, wherein the MLK activity is selected from the group consisting of an enzymatic activity, an ability to bind a SEK1 protein, and an ability to phosphorylate a SEK1 protein;

c) comparing the level of MLK activity in the presence of the compound with the level of MLK activity in the absence of the compound, wherein a decrease in MLK activity in the presence of the compound is indicative that the compound has an ability to inhibit MLK activity.

21. (Twice Amended) The method of Claim 19, wherein the enzymatic activity is kinase activity.

22. (Once Amended) The compound of Claim 51, wherein the neurological condition is a neurological disease whereby glutamate or kainic acid mediated excitotoxicity is involved in neuronal cell death.

23. (Once Amended) The compound of Claim 51, wherein the neurological condition is Huntington's disease or Alzheimer's disease.

24. (Twice Amended) A method for assessing a compound's ability to inhibit MLK activity, comprising:

a) incubating a compound in the presence of a MLK protein and appropriate MLK substrate therefor, under conditions sufficient for enzymatic activity, wherein the MLK protein is selected from the group consisting of MLK1, MLK2, MLK3, and combinations thereof; and

b) determining the presence or amount of phosphorylated product;

wherein a change in amount of phosphorylated product, when compared to incubating MLK with appropriate substrates absent the compound, is indicative of the compound's ability to inhibit the enzymatic activity of MLK.

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29. (Twice Amended) A method for assessing a compound's ability to inhibit MLK kinase activity, comprising:

a) contacting a neuronal cell with a compound under conditions sufficient for MLK enzymatic activity; and

b) determining the presence or amount of phosphorylated MLK product;

wherein a change in amount of phosphorylated product, when compared to incubating a cell absent the compound, is indicative of the compound's ability to inhibit MLK kinase activity.

30. (Twice Amended) The method of Claim 29 further comprising:

c) determining cell viability after step (a);

wherein any increase in the cell's viability status relative to a control is indicative of the compound's ability to inhibit MLK kinase activity and thereby prevent neuronal cell death.

Please add the following new claim 45:

45. (New) A method for assessing the ability of a compound to inhibit MLK activity and to prevent neuronal cell death, comprising the steps of:

a) contacting a compound with a MLK protein and substrate therefor, wherein the MLK protein is selected from the group consisting of MLK1, MLK2, MLK3, and combinations thereof;

b) measuring the level of MLK activity, wherein the MLK activity is selected from the group consisting of an enzymatic activity, an ability to bind a SEK1 protein, and an ability to phosphorylate a SEK1 protein;

c) comparing the level of MLK activity in the presence of the compound with the level of MLK activity in the absence of the compound, wherein a decrease in MLK activity in the presence of the compound is indicative that the compound has an ability to inhibit MLK activity;

d) contacting the compound having an ability to inhibit MLK activity with cultured neuronal cells having activated MLK activity, wherein the activated MLK activity is selected from the group consisting of an enzymatic activity, an ability to bind a SEK1 protein, and an ability to phosphorylate a SEK1 protein; and

e) comparing the occurrence of apoptosis in the cultured neuronal cells in the presence of the compound with the occurrence of apoptosis in the cultured neuronal cells in the absence of the compound;

wherein the compound having an ability to inhibit MLK activity has the ability to prevent neuronal cell death when the occurrence of apoptosis in the cultured neuronal cells in the presence of the compound is less than the occurrence of apoptosis in the cultured neuronal cells in the absence of the compound.

REMARKS

Claims 1-25, 27-32, and 44 are pending; claims 20, 25, and 32 have been canceled; and claim 45 has been added.

Claims 1, 2. 7, 8, 9, 12, 13, 14, 16, 17, 19, 21, 22, 23, 24, 29, and 30 have been amended to clarify Applicant's invention. Pursuant to the provisions of 37 C.F.R. §1.121(c)(1)(ii), a marked-up copy of claims 1, 2. 7, 8, 9, 12, 13, 14, 16, 17, 19, 21, 22, 23, 24, 29, and 30 is attached as Appendix A.

The preamble (and language elsewhere in the claim that corresponds to the preamble) of claims 1, 9, 14, 19, 24, and 29 have been amended to more clearly reflect the steps of the method